

1 VQE results Aer Estimator (No Shots)

(Full Hamiltonian)				Anharmonic Oscillator		$\Lambda = 32$	COYBLA Max 10K Iterations		
Ansatz	Tolerance	Converged runs	Mean iter	VQE min E.	Δ_{min}	VQE median E.	Δ_{median}	Exact	Time
RA r1 rl	1e-01	100/100	85	7.5134e+00	7.5134e+00	5.9848e+01	5.9848e+01	6.1822393761e-06	00h 00m 43s
RA r1 rl	1e-02	100/100	331	1.0162e+00	1.0162e+00	1.1105e+01	1.1105e+01	-	00h 02m 25s
RA r1 rl	1e-03	100/100	3142	2.9254e-01	2.9253e-01	1.7659e+00	1.7659e+00	-	00h 18m 23s
RA r1 rl	1e-04	7/100	7148	3.4605e-02	3.4599e-02	5.794e+00	5.794e+00	-	00h 48m 36s
Ansatz	Tolerance	Converged runs	Mean iter	VQE min E.	Δ_{min}	VQE median E.	Δ_{median}	Exact	Time

Table 1